Psychopathological symptoms in adolescents with delinquent behavior

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Abstract: Young people who end up in the justice system have an increased risk for mental health problems, which may contribute to delinquent behavior and can affect the rehabilitation process. The aim of the study was to identify the presence of the psychiatric symptoms in adolescents with delinquent behavior.

We studied 51 adolescents with delinquent behavior such as theft (35), fight (6) and roguery (10), examined within the forensic psychiatric expertise in Timisoara, aged 14-18 years, all males and a control group of 47 males adolescents without delinquent behavior, with the same characteristics. It was used Youth Self Report from the battery of tests ASEBA (Achenbach System of Empirically Based Assessment).

The results showed that juvenile offenders had higher scores with clinical significance on symptoms of anxious/depressed (11,8%), withdrawn/depressed (15,7%) as well as the rule-breaking (31,4%) and aggressive behavior (15,7%) and also affective problems (13,7%), ADHD problems (20%) and conduct problems (26%), according to DSM-IV. The correlation’s analysis showed a strong correlation between internalizing and externalizing symptoms, especially between affective problems and behavioral problems of delinquent adolescents.

The relationship between delinquency and psychiatric disorders, although being a complex one, reveals that juvenile offenders are at high risk for psychopathology in adult life; the diagnosis and the effective treatment of psychiatric disorders may reduce the risk of delinquent behavior and the relapses, the absence of psychiatric treatment could contributes to the increased of crime rates and the psychiatric disorders in the adult life.

Key Words: adolescents, juvenile delinquency, psychiatric disorders, psychopathology.

Forensic psychiatric research, in collaboration with professionals from all fields concerned (psychiatrists, psychologists, sociologists, forensic doctors, lawyers, police officers) contribute to elucidate the etiological factors in finding measures to reduce the phenomenon of juvenile delinquency, the recovery of young people and relapse prevention of deviant behaviors. Many criminological theories have demonstrated the existence of strong ties between the decision of a young man to choose a deviant behavior and bio-psycho-social factors such as low intelligence, temperament, impulsivity with immediate responses to stimulus,
extroversion, psychiatric disorders criminal parents, life disturbed family, school failure, involvement in a group of adolescent offenders.

Young people who end up in the justice system have an increased risk for mental health problems, which may contribute to delinquent behavior and can affect the rehabilitation process among juvenile offenders [1], occurring many psychiatric disorders with an increased frequency of affective disorders, or conduct disorders [2].

The prevalence of mental disorders among minors falling under justice proved to be about 66% [3], three times higher than in the general population, half of them being with substance use disorder and almost a quarter being diagnosed with conduct disorder [4-6].

The objective of the present study was to analyze the psychiatric symptoms in adolescents with delinquent behavior in the forensic psychiatric expertise.

METHOD

There were studied 51 adolescents with delinquent behavior such as theft (35), fight (6) and roguery (10), examined within the forensic psychiatric expertise in Timisoara, between October 2012 and September 2013. Juveniles were aged 14-18 years (mean age 15.1; SD 0.95), all males. Regarding to the number of delinquent acts, 30 (59%) adolescents have committed a single act, 16 (32%) of them have committed two or three acts, a small percent of them committed more than three acts (9%). The control group consisted of 47 male adolescents without delinquent behavior, diagnosed with various psychiatric disorders (depressive disorder, anxiety disorder, conduct disorder, ADHD) in the Clinic of Psychiatry and Neurology for Children and Adolescents from Timisoara in the same period, aged between 14 and 17 years (mean age 15.5; SD 1.06). The protocol of the study was approved by the local Ethics Committee from the two institutions involved. To identify the psychopathological symptoms in adolescents was used Youth Self Report from the battery of tests ASEBA (Achenbach System of Empirically Based Assessment). The questionnaire was filled in by all adolescents from the study after they signed the informed consent form.

After completing the questionnaire the results were grouped into two scales: the scale that measures syndromes grouped into internalizing symptoms (anxiety/depression, withdrawn/depression, somatic complaints) and externalizing symptoms (social problems, thought problems, attention problems, rule-breaking behavior, aggressive behavior) and the scale derived DSM IV (Diagnostic and Statistical Manual of Mental Disorder – IV-R) to identify the presence of psychiatric disorders: affective problems, anxiety problems, somatic complaints, ADHD problems, oppositional defiant problems and conduct problems. Results were analyzed according to the mean scores obtained on the two scales and also the frequency of the problems with clinical significance, for the subjects in the study group compared with the results obtained from the subjects in the control group; comparative analysis was performed using the test One Way ANOVAs. We also analyzed the results in relation with the type of delinquent acts as well the correlations between the presence of emotional problems and behavior problems, using the Pearson’s correlation.

Statistical data processing was performed using SPSS 17.0 for Windows.
Results

The results from measuring scales syndromes (Fig. 1) showed very similar results for the young who committed acts of theft/fight, with higher scores on symptoms of anxious/depressed (mean 8.22; SD 3.44/mean 8.66; SD 4.63), as well on the rule-breaking behavior (mean 13.62; SD 6.27/mean 13.16; SD 4.21) and aggressive behavior (mean 12.37; SD 7.54/mean 12.33; SD 8.23), the same symptoms having also clinical significance (Fig. 2). The adolescents who committed aggressive acts had also high scores for attention problems (mean 9.83; SD 5.30).

The adolescents from the control group obtained similar results with a top of the following symptoms: anxious/depressed (mean 9.58; SD 5.30), withdrawn/depressed (7.10; SD 3.48), social problems (mean 7.71; SD 5.06) and aggressive behavior (mean 11.19; SD 7.86). Also this time the differences between juveniles with delinquent behavior and adolescents in the control group were statistically insignificant except for somatic complaints (p = .026), social problems (p = .006) and rule-breaking behavior (p = .001).

The analysis of the results obtained from the scales derived DSM IV (Fig. 3) showed that adolescents with delinquent behavior, independently of delinquent acts (theft, fight or roguery) had more frequently affective problems, ADHD problems and conduct problems (Fig. 4). However the clinical significance of the symptoms was higher for anxiety problems (33%) and ADHD problems (33%) in adolescents with fighting acts, while the adolescents with theft acts had more ADHD problems (20%) and conduct problems (34%) with clinical significance.

Adolescents in the control group without delinquent behavior obtained similar results (Figure 3) with more affective problems (mean 10.41; SD 4.92), ADHD problems (mean 5.78; SD 4.19) and conduct problems (mean 7.43; SD 6.80), also with clinical significance (Fig. 4). The difference between delinquent teenagers and those without delinquent behavior was statistically significant only for ADHD problems (p = .017) and the conduct problems (p = .006).

The correlation's analysis showed that both delinquent teenagers and those without delinquent behavior had a strong correlation between internalizing and externalizing symptoms, especially with affective problems (anxiety and depression) and behavioral problems of children as shown in Table 1.

Discussions

Adolescents with delinquent behavior associated with emotional and behavioral problems manifest these problems in different contexts, home, school, community but the involved institutions are not prepared to handle these complex situations. So, it is necessary a detailed neuropsychiatric and psycho-educational assessment because the aggressive behavior may divert attention from some psychiatric disorders or neurological problems [7]. The degree of psychiatric problems was directly related with indicators of family adversity, physical abuse, parental divorce, domestic violence and other psychosocial variables or substance abuse [8].

Moreover, some studies show higher rates of internalizing symptoms (anxiety, depression), but also externalizing symptoms (aggressiveness, rule-breaking behavior, hyperactivity) among juvenile offenders in detention centers comparing with non-delinquents [9 - 10].

Depression and delinquent behavior / conduct problems are two of the most common mental health problems involving adolescents [11]. It is therefore imperative to identify risk factors involved. For example, adolescents with depressive symptoms and delinquency could represent risks to future school failure, substance abuse, victimization or interpersonal problems.

Our study found that among juvenile offenders
examined within the forensic psychiatric expertise were identified numerous emotional and behavioral symptoms, mostly with clinical significance framed within the psychiatric disorders according to DSM –IV like affective disorders (13.7 %), anxiety disorders (14%), ADHD (20%) and conduct disorder (26%).

Mordre's study [6] shows that three psychiatric disorders in children are positively associated with delinquency in adult life: conduct disorders (56%), ADHD (Attention Deficit/Hyperactivity Disorder) comorbid with conduct disorders (54%) and conduct disorders associated with emotional disorders (33%).

The study conducted in 2007 [12] shows that 70% of juveniles subjects falling under the justice system have at least one mental disorder such as conduct disorder or substance use disorders, but even after excluding these disorders a 66% percentage of minors end up having other psychiatric disorders, 26% were diagnosed with an anxiety disorder and 14% with affective disorders.

Our results also showed that among juvenile delinquents were present many emotional symptoms (depression, anxiety, and social problems) and behavioral problems (attention problems, rule-breaking behavior, aggressiveness).

White's study [13] uses also YSR to identify psychiatric problems in adolescents with delinquent behavior. The juveniles who were referred to court are studied over three years that followed the appearance of psychiatric problems to them. He finds increased levels of depression and anxiety in adolescents who fall under justice, but this fact is not related to the situation of being caught itself, the explanation being the existence of comorbidity between anxiety and/or depression and conduct disorders.

Regarding ADHD, in our study the clinical frequency of these symptoms among juvenile offenders was lower for the adolescents who stole comparing to that of the youths with aggressive acts (possible due to the impulsivity of ADHD symptoms) and of non-delinquent juveniles, but higher than the frequency of clinical

### Table 1. Pearson's correlations between emotional and behavioral symptoms for the adolescents with delinquent behavior

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PC - Pearson correlation; * correlation is significant at the 0.05 level (2-tailed); ** correlation is significant at the 0.001 level (2-tailed)
affective symptoms (14%) or ODD (Oppositional Defiant Disorder) symptoms (6%). These results are somewhat inconsistent compared to the findings of Pardini and Fite [8], which aim to examine the symptoms of conduct disorder and oppositional symptoms and those of ADHD as predictors for the subsequent evolution of children and adolescents in many psychological areas. Their study shows that the children with ADHD and ODD have an increased rate of anxiety and/or depression and also social problems and academic failure for the children with ADHD. The same study shows that if the symptoms of conduct disorder are controlled, the presence of ODD symptoms only increases the risk of delinquency. On the other hand Pardini's study shows that ADHD does not predict criminal behavior only in terms of the association of conduct problems and ODD, and only when these symptoms are not controlled.

Our study also have identified numerous conduct problems to the minors with delinquent behavior, especially for those who stole or were beaten, the highest percentage being clinical significant. The different results obtained by us can be explained by the fact that in our study we aimed to identify symptoms of psychopathology in juveniles with delinquent behavior, but not considering the possible psychiatric comorbidities in these patients. Other studies, however, show that adolescents with ADHD are at risk of entering in the justice system compared to their peers without ADHD, with increased risk of detention in adolescence [14-16].

Numerous studies [11, 12] show that more than 30% of adolescents who meet criteria for a depressive disorder meet the criteria for conduct disorder too, and 50% of those who have conduct disorder have also depressive disorder. Kofler's study [11] shows that depressive symptoms and delinquent behavior in adolescence are closely related; both vary according to the age, depressive symptoms can predict delinquent behavior, and delinquent behavior can also lead to depressive symptoms. His study shows that early emergence of depressive symptoms increase the risk for delinquent behavior occurrence. This is probably going through a developmental process through which the irritability associated with the depression may initially lead to increased aggression and the breaking rule behavior.

Over time, these behaviors can have a negative impact on relationships with parents and peers, ultimately leading to adolescents association with deviant peers and ultimately to delinquency. In our study we have found numerous significant correlations between emotional and behavioral problems in delinquent adolescents, the most important being between the symptoms of anxious/depressed, withdrawn/depressed and attention problems or aggressiveness, respectively anxiety problems and ADHD or ODD problems.

The main limitation of our study was that the study design was cross-sectional, juvenile delinquents are examined only once, when they were placed under justice. Recent studies in the field of juvenile delinquency have a longitudinal design that follows the evolving delinquent behavior, aimed specifically to identify the risk factors involved in the development of delinquent behavior playing an important role in prevention. Another important limitation of the study was not discussing demographic factors with possible involvement in occurrence of the delinquent behavior (family, schooling, mental level) this happened because the group of teens as taken in the study was small and statistical processing according demographic variables was not possible.

Although the control group could have been chosen from non-delinquent adolescents without psychiatric disorders, the fact that the results we have obtained after performing the study were very similar to those obtained by teens who already had a diagnosed psychiatric disorder without behavioral delinquent, suggested that the presence of an undiagnosed or untreated psychiatric disorder may have as a consequence the occurrence of delinquent behavior.

If childhood psychiatric status is a risk factor for crime, then the diagnosis and the effective treatment of psychiatric disorders may reduce the risk of delinquent behavior and the relapses [5], the absence of psychiatric treatment could contributes to the increased of crime rates and the psychiatric disorders in the adult life [10].

**CONCLUSIONS**

Often disruptive or delinquent behavior of young people is the result of a symptom of undiagnosed or untreated mental health problem. The problem can occur when the child came to the attention of justice. In these situations it is necessary to refer the juvenile to a mental health service for medical assessment, this time making it ideal for preventing the recidivism of delinquent behavior [13].

Forensic psychiatric expertise must identify the genuine reasons and circumstances of the offense and any anti-social tendencies that continue to place the minor in the area of criminal deviance and recommend medical and psychosocial measures for targeting the young in one desirable direction. Reduction of discernment is an important element for guiding the penalty for non-punitive alternative applicable in the community to promote a positive future development.

Recommendations made to eliminate risk factors such as individual, family, school, and social environment will assess whether the measures can be applied within the community of the child or if such measures have little chance of success. Administration of measures involving deprivation of liberty leaves the impression of young
irrecoverable when in fact they have committed the crime because of psychiatric disorders. For them there is a real chance of recovery so that deprivation of liberty should be avoided because of the danger of negative induction rehabilitation centers and labeling.

References